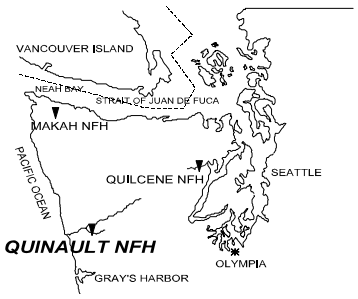
QUINAULT NATIONAL FISH HATCHERY
Humptulips, Washington

INTRODUCTION

The Western Washington Fish and Wildlife Office (WWFWO) and the Olympia Fish Health Center (OFHC) assist the three National Fish Hatcheries (NFH) on the Olympic Peninsula -- Makah, Quilcene, and Quinault (see locale map below). The WWFWO, OFHC, and NFHs work together to restore salmon for domestic and international fisheries in compliance with Trust responsibilities to tribes, court orders, agreements with states, and international treaties. WWFWO works with cooperators to program and evaluate hatchery production to assure obligations are met with minimal impact on wild fish. OFHC provides fish health diagnostic and treatment services to assure optimum post-release survival of hatchery fish.

This annual report provides basic information on Quinault NFH to inform Service employees, visitors, and our cooperators of their hatchery programs.



Western Washington locale map

Quinault NFH, located within the Quinault Indian Reservation on the Olympic Peninsula, began operating in 1968. Its general goals include rebuilding salmon and steelhead runs along the coast of Washington and contributing to current and future fisheries. Specific objectives to meet these goals vary by species and are described on the following pages.

QUICK REFERENCE DATA

LEGEND:	AVG	=	Average (mean)
	BY	=	Brood Year
	FL	=	Fork Length
	CHS	=	Chum Salmon
	COS	=	Coho Salmon
	FCS	=	Fall Chinook Salmon
	WST	=	Winter Steelhead
	♀	=	Female
	♂	=	Male

▸ ADULT AGES AT RETURN

	AGE RANGE	2001 AVG. AGE	1991-2001 AVG. AGE
FCS	2-6 yrs.	4.0	4.4
COS	2-3 yrs.	3.0	2.9
CHS	3-5 yrs.	3.3	3.9
WST	3-5 yrs.	3.3	3.4

▸ ADULT FORK LENGTHS in millimeters (inches)

	FL RANGE	FL MEAN
FCS	340-1300mm (13-51")	846mm (33")
COS	303-827mm (12-32")	584mm (23")
CHS	564-874mm (22-34")	726mm (28")
WST	206-930mm (8-36")	708mm (27")

▸ ADULT ENTRY DATES TO HATCHERY

	1992-2001 RANGE	1999 MEAN DATE
FCS	Sep - Dec	Nov 6, 1999
COS	Sep - Feb	Oct 29, 1999
CHS	Oct - Dec	Nov 10, 1999
WST	Sep - Mar	Dec 14, 1999

▸ NUMBER AND DATES OF ADULTS SPAWNED

	2001 Date Range	2001 # Spawned ♂	♀	Total	1986-2001 Avg # Spawned
FCS	10/31-11/14	10	9	19	92
COS	10/17-12/04	375	386	761	1232
CHS	10/09-12/04	926	923	1899	763
WST	11/14-02/13	285	274	559	874

Please direct questions, comments, and suggestions to:

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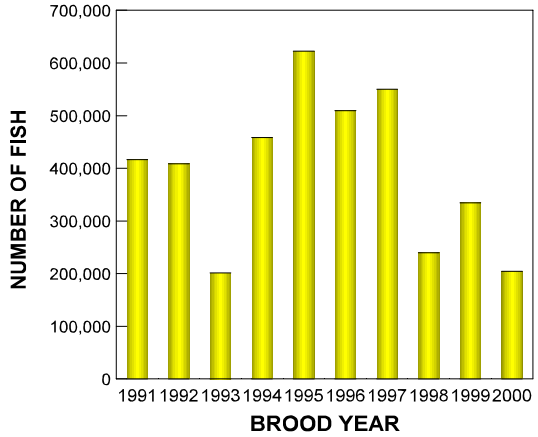
510 Desmond Drive SE, Suite 102
Lacey, WA 98503-1273
(360) 753-9440

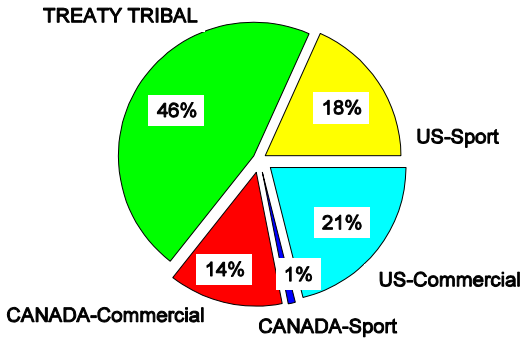
Quinault National Fish Hatchery
3 Sockeye Road
Humptulips, WA 98552
(360) 288-2508

FALL CHINOOK SALMON

FALL CHINOOK RELEASES
(Brood Years 1991 - 2000)



CATCH OF FALL CHINOOK
(Brood Years 1984-1997)



OBJECTIVE: Restore fall chinook population and support coastal chinook fisheries.

RELEASES: Program goal is to release 600,000 subyearlings into Cook Creek, a tributary of the Quinault River, at the hatchery.

CATCH: Over 5,000 Quinault NFH adult chinook are caught in U.S. and Canadian waters each year, of which approximately 2,000 are caught in the Quinault River system. Hatchery production accounts for about one-fourth of the total catch in the river.

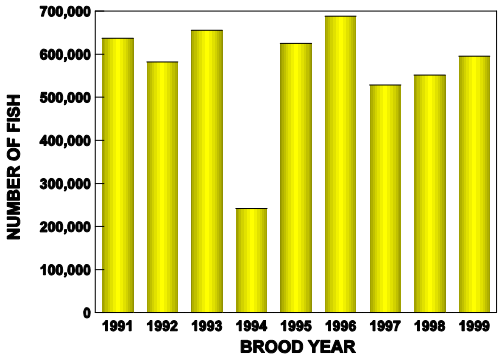
FCS PROCESSED AT HATCHERY RACK BY RETURN YEAR

	Age at Return					Total
Return Year	2	3	4	5	6	per Year
1993	2	5	52	93	2	154
1994	9	13	101	166	7	296
1995	1	35	31	78	2	147
1996	3	7	55	25	5	95
1997	2	32	93	38	3	168
1998	1	6	19	34	1	61
1999	0	7	42	30	0	79
2000	0	2	28	13	0	43
2001	4	2	26	8	0	40

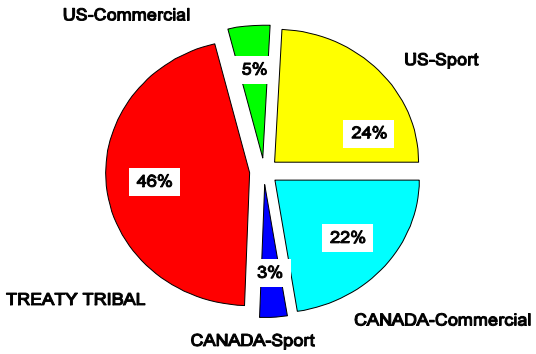
The FCS program is augmented by a successful Quinault Lake broodstock capture program. Increased production is not desired because of considerable natural production in Cook Creek and the Quinault River. Total fishery harvest and hatchery return averages 1 percent of releases.

COHO SALMON

COHO RELEASES
(Brood Years 1991 - 1999)



CATCH OF COHO
(Brood Years 1988-1998)



OBJECTIVE: Restore coho populations and provide fish for coastwide fisheries.

RELEASES: The program goal is to release 660,000 yearlings annually into Cook Creek.

CATCH: Over 12,000 adults are caught coastwide or return to the hatchery.

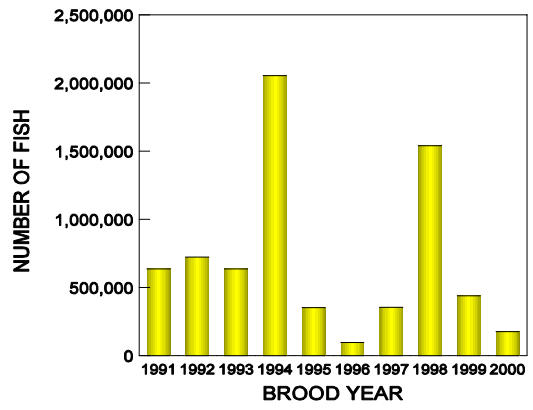
COHO RETURNS TO HATCHERY RACK BY RETURN YEAR

	Age at Return		
Return Year	2	3	Total per Year
1991	1,906	10,836	12,742
1992	480	3,436	3,916
1993	55	1,573	1,628
1994	115	331	446
1995	411	3,885	4,296
1996	109	6,446	6,555
1997	167	698	865
1998	844	2,526	3,370
1999	1,461	11,550	13,011
2000	2,413	7,550	9,963
2001	240	24,551	24,791

The number of adult returns indicates a successful coho program. Total survival rate averages 2.1 percent. Additional coded-wire tagging was initiated in the fall/winter of 1997-98 to evaluate the effects of selective fisheries. A 4-year density study was begun in 2000 to determine the effects of three production levels on adult survival rates.

CHUM SALMON

CHUM RELEASES
(Brood Years 1991 - 2000)



CATCH OF CHUM
(1989 - 2000)

Calendar Year	Number Caught Quinault River
1989	2,564
1990	1,658
1991	2,564
1992	2,571
1993	5,258
1994	1,452
1995	690
1996	595
1997	1,037
1998	4,727
1999	594
2000	754

OBJECTIVE: Restore chum populations and provide fish to fisheries. The chum program is managed as a composite hatchery/natural program, since many fish spawn in Cook Creek below the hatchery and in the Quinault River.

RELEASES: An average of 747,000 hatchery fry are released at the hatchery into Cook Creek.

CATCH: The Quinault River yields an average catch of 2,800 chum (hatchery/natural composite).

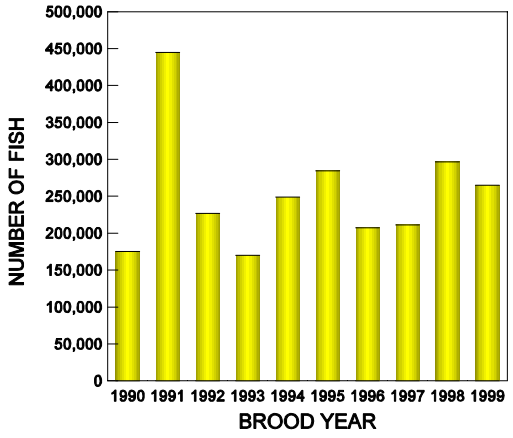
CHUM RETURNS TO HATCHERY RACK BY RETURN YEAR

	Age at Return				Total
Return Year	3	4	5	6	per Year
1992	86	511	73	0	670
1993	127	662	22	0	811
1994	42	1,617	439	0	2,098
1995	23	266	179	14	482
1996	55	47	25	0	127
1997	376	213	5	0	594
1998	10	2,467	20	0	2,497
1999	38	177	322	0	537
2000	117	93	11	0	221
2001	462	230	6	0	698

Cook Creek supports significant natural production.
Hatchery production exists solely from adults returning to the hatchery.

WINTER STEELHEAD

WINTER STEELHEAD RELEASES
(Brood Years 1990 - 1999)



CATCH OF WINTER STEELHEAD
(1991 - 2001)

Catch Year	Number Caught Quinault River
1991-92	1,309
1992-93	3,989
1993-94	1,127
1994-95	1,018
1995-96	2,907
1996-97	2,171
1997-98	1,442
1998-99	2,484
1999-00	720
2000-01	2,585
2001-02	2,384

OBJECTIVE: Restore steelhead populations and provide fish to tribal and sport fisheries.

RELEASES: Quinault NFH releases an average of 230,000 yearlings at the hatchery, plants 50,000 yearlings in the Hoh River, and transfers 50,000 subyearlings to the Hoh Tribe.

CATCH: An average of 2,680 hatchery fish are caught in the Quinault River system. Catches are composed of NFH and Quinault Lake tribal hatchery production.

WST RETURNS TO HATCHERY RACK BY RETURN YEAR

	Age at Return				Total
Return Year	2	3	4	5	per Year
1992-93	0	1,761	927	14	2,702
1993-94	0	96	491	0	587
1994-95	0	1,546	475	39	2,060
1995-96	24	2,386	605	6	3,021
1996-97	16	1,554	1,133	0	2,703
1997-98	9	1,018	1,201	0	2,228
1998-99	6	2,059	898	0	2,963
1999-00	0	1,000	586	0	1,586
2000-01	22	1,224	1,386	0	2,612
2001-02	0	396	132	0	528

The number of adult returns indicates a successful program.
Total survival rate averages 1.8 percent.